

Application No.: 10/566,631

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CENTRAL FAX CENTERAMENDMENTS TO THE CLAIMS:

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Please amend the claims as follows:

1. (Original) A luneberg lens comprising:

a lens which is configured by combining lens parts of spherical core and spherical shell-like resin foams, wherein
the lens is sealed by a synthetic resin film which is formed along a surface of the lens and in which a thickness is 100 μ m or less and of which own relative dielectric constant is higher than a relative dielectric constant of the outermost layer of the lens.

2. (Original) The luneberg lens as set forth in claim 1, wherein

the synthetic resin film is a shrink film.

3. (Currently Amended) An antenna apparatus, comprising:

a luneberg lens, comprising

a hemispherical core having a cross-section,

a plurality of hemispherical luneberg [[lens]] shells arranged concentrically around the hemispherical core,

a reflecting plate which is attached to a two-divided cross-section of a sphere of this lens the cross-section of the hemispherical core,

a primary feed which is placed at a focal point portion of the lens, and

a holding unit of this primary feed, wherein

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the reflecting plate and the luneberg lens are sealed by a synthetic resin film formed along a surface of the luneberg lens, the synthetic resin film having a thickness of 100μm or less and a relative dielectric constant that is higher than a relative dielectric constant of an outermost layer of the plurality of hemispherical luneberg shells hemispherical luneberg lens is configured by the luneberg lens set forth in claim 1.

4. (Currently Amended) An antenna apparatus comprising:

a luneberg lens of which surface is sealed by a cover made [[by]] of a synthetic resin sealing the surface of the luneberg lens according to claim 1,

a primary feed which is placed at a focal point portion of the lens, and

a holding unit of the primary feed, wherein

the hemispherical luneberg lens is configured by the luneberg lens as set forth in claim 1,

and

the cover has a thickness of 2mm or less.

5. (New) The antenna apparatus according to claim 3, further comprising: a cover made of a synthetic resin sealing the surface of the luneberg lens,

wherein the cover has a thickness of 2mm or less.